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Remarks

Claim 1 has been amended to recite that the overcoat is less strippable and more wear-resistant than the intermediate coating "after the overcoat and intermediate coating are dried or cured". Claim 8 has been amended to recite that the intermediate coating has a "dry coating" thickness of about 2.5 to about 75 micrometers. Support for these amendments may be found in the written description at, e.g., page 2, lines 9-10 and page 8, lines 16-27. Following entry of this amendment, claims 1-27, 36 and 37 will be pending in this application.

This Amendment is accompanied by a Communication enclosing fresh copies of the last three references listed on sheet three of the Substitute Form PTO -1449 submitted by applicants with their April 9, 2004 Information Disclosure Statement, together with a duplicate copy of sheet 3.

The Examiner may wish to refer to the Declaration of Robert D. P. Hei Under 37 C.F.R. §1.132 (the "Hei Declaration") filed July 1, 2004 in copending parent Application Serial No. 09/838,884. The Hei Declaration addresses most of the issues raised in the present Office Action and is occasionally cited or quoted below. If desired by the Examiner, applicants can submit a new declaration from Dr. Hei limited to the issues raised in the present Office Action. Applicants believe however that the issues are relatively straightforward and can be fully addressed by the present remarks and portions of the already-submitted Hei Declaration.

Rejection of Claims 1-19 and 36 under 35 U.S.C. §102(b)

Claims 1-19 and 36 were rejected under 35 U.S.C. §102(b) as being anticipated by Published PCT Application No. WO 98/11168 (Hamrock et al.), on grounds *inter alia* that "All limitations of the claimed invention are either disclosed or inherent in the above reference". Applicants respectfully disagree. Hamrock et al. describe a vinyl floor coating system that may employ a primer coating (which solely for purposes of discussion could be referred to as an "intermediate coating") and a 100% solids radiation curable coating composition. The latter composition (which solely for purposes of discussion could be

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referred to as an "overcoat" composition) is based on a specially formulated polyfunctional isocyanurate monomer. Hamrock et al. do not disclose a "coated substrate comprising a strippable intermediate coating atop the substrate and a strip agent-permeable waterborne overcoat adhered to the intermediate coating" as recited in rejected claims 1-19 and 36. Hamrock et al.'s 100% solids radiation curable overcoat is not a waterborne overcoat. Moreover, a person having ordinary skill in the floor finish art who consulted Hamrock et al. would not use a waterborne overcoat atop Hamrock et al.'s intermediate coating. Hamrock et al. say that commercially available aqueous emulsion based floor finishes "have been less than completely satisfactory for several reasons" including their "relatively low solids content" and the need to dry each successive application of the finish composition "before additional coatings are applied and/or before pedestrian traffic is allowed across the treated floor" (see page 1, lines 19-27). These are reasons not to use a waterborne overcoat atop Hamrock et al.'s intermediate coating (see also paragraph 9 in the Hei Declaration). Applicants accordingly request withdrawal of the 35 U.S.C. §102(b) rejection of claims 1-19 and 36 as being anticipated by Hamrock et al.

Rejection of claims 20, 22-24 and 27 under 35 U.S.C. §102(b)

Claims 20, 22-24 and 27 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,421,782 (Bolgiano et al.), on grounds *inter alia* that "Bolgiano et al. disclose flooring materials and a process for making such flooring materials whereby a substrate (corresponding to the intermediate coating of the claimed invention) is treated with a solution comprising water, acrylic acid and a surfactant (corresponding to the topcoat of the claimed invention and meeting the limitations that the topcoat is UV curable and comprises an acrylate)" (emphasis in original). Applicants respectfully disagree. Bolgiano et al. describe a factory process for coating vinyl flooring tiles. A radiation-curable first layer (which solely for purposes of discussion could be referred to as an "intermediate coating") is applied to the tiles followed by a second layer containing water, acrylic acid and a surfactant. This is in some respects the inverse of applicants' claimed strippable laminate finish kit.

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Bolgiano et al.'s second layer would be *more* strippable than Bolgiano et al.'s intermediate coating. Bolgiano et al.'s second layer contains no initiator. If coated by itself, it would not polymerize and would easily be stripped. Bolgiano et al.'s first layer is nonaqueous (see, e.g., col. 6, lines 11 and 53), is applied and cured using factory-type coating conditions in which the moving coated tiles are passed under medium pressure mercury lamps (see e.g., col. 5, lines 46-53), is not said to be strippable, and would be expected by a person skilled in the art to be very difficult to strip. Bolgiano et al. do not show and actually teach away from applicants' claimed strippable laminate finish kit, for at least the reason that Bolgiano et al. do not show a combination having a dried overcoat that is "less strippable and more wear resistant than the dried intermediate coating". Applicants accordingly request withdrawal of the 35 U.S.C. §102(b) rejection of claims 20, 22-24 and 27 as being anticipated by Bolgiano et al.

Rejection of claim 21 under 35 U.S.C. §103(a)

Claim 21 was rejected under 35 U.S.C. §103(a) as being unpatentable over Bolgiano et al. in view of Published PCT Application No. WO 94/22965 (Koreltz et al.), on grounds *inter alia* that:

"However, Koreltz et al. disclose compositions used to strip coatings such as floor finishes and/or greasy residues from surfaces such as floors and the composition is effective in removing multiple coatings comprising urethane/acrylic polymers (Page 1, lines 5-9 and Page 3, lines 35-37).

"Accordingly, it would have been obvious to one having ordinary skill in the art to add the strip composition disclosed by Koreltz et al. to the floor finishing system disclosed by Bolgiano et al. given that such compositions can be used to remove multiple coatings comprising urethane/acrylic polymers."

As noted above, Bolgiano et al.'s composition is applied to tiles and cured using factory-type coating conditions in which the moving coated tiles are passed under medium pressure mercury lamps, is not said to be strippable, and would be expected by a person skilled in the

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art to be very difficult to strip. Koreltz et al.'s strippers are relatively mild, and would not be assumed by a person skilled in the art to be capable of removing Bolgiano et al.'s radiation-cured first layer. Moreover, as shown in the Hei Declaration (see paragraphs 5-8), tests of a Koreltz et al. stripper using Koreltz et al.'s 2.5 minute dip test did not remove a radiation-cured waterborne overcoat whether applied as a single layer or in a laminate finish. Even if Bolgiano et al. and Koreltz et al. were combined as proposed in the Office Action, the result would not make obvious a strippable laminate finish kit as recited in rejected claim 21, for at least the reason that Bolgiano et al. do not show a combination having a dried overcoat that is "less strippable and more wear resistant than the dried intermediate coating". Applicants accordingly request withdrawal of the 35 U.S.C. §103 (a) rejection of claim 21 as being unpatentable over Bolgiano et al. in view of Koreltz et al.

Rejection of claims 20, 22-27 and 37 under 35 U.S.C. §103(a)

Claims 20, 22-27 and 37 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hamrock et al. in view of U.S. Patent No. 6,444,134 B1 (Holman et al.), on grounds *inter alia* that "it would have been obvious to one having ordinary skill in the art to replace the radiation curable coating comprising a polyfunctional isocyanurate and a hydroxyalkyl acrylate, as taught by Hamrock et al., with a water based finish including urethane and acrylic polymers and copolymers and crosslinking agents given that Holman et al. specifically teach that such water-borne coatings exhibit high hardness, flexibility, UV resistance, chemical resistance and abrasion resistance." Applicants respectfully disagree. Holman et al. do not describe finishes like those described by Hamrock et al., and do not relate to a strippable laminate finish kit as recited in rejected claims 20, 22-27 and 37. Holman et al. describe a hardwood floor refinishing system meant to avoid the sanding step that typically is required when completely removing and renewing a hardwood floor finish (see e.g., col. 1, lines 9-35 and col. 2, lines 18-20). Hardwood floors whose finish has deteriorated are usually sanded to remove the old finish and then recoated (see e.g., Holman et al. at col. 1, lines 15-35). Holman et al. propose to instead etch an existing hardwood floor finish using a caustic

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solution (see e.g., col. 2, lines 30-38 and col. 3, lines 39-50), to rinse the etched surface and then to apply a water-based renewal finish. Holman et al. do not strip the underlying finish and do not say that their renewal finish is strippable. Holman et al. leave some of the underlying finish in place and apply the renewal finish over it (see e.g., col. 2, lines 34-37). Holman et al. also say that their renewal finish has "chemical resistance" (see e.g., col. 4, lines 31-35 and 59-63). A person having ordinary skill in the floor finish art who consulted Holman et al. would not use Holman et al.'s renewal finish if strippability was desired. Chemical resistance is **contrary** to strippability and a reason **not** to use Holman et al.'s renewal finish. It is also a reason **not** to use Holman et al.'s renewal finish in place of Hamrock et al.'s radiation curable overcoat (see also paragraphs 10-11 in the Hei Declaration). In Dr. Hei's words (see paragraph 10 in the Hei Declaration):

"In my opinion a person having ordinary skill in the resilient floor finish art would not substitute a part of Holman et al.'s system (namely, the chemically resistant water-based renewal finish) for a part of Hamrock et al.'s system (namely, the 100 % solids radiation curable overcoat). Doing so would involve substituting a component of a hardwood floor refinishing system that is not said to be strippable for the upper layer of a vinyl floor coating system that should be strippable. Doing so would also be contrary to Hamrock et al.'s statements that finishes with an aqueous emulsion formulation, low solids content or an air drying requirement are "not completely satisfactory". Moreover, doing so would be contrary to the ordinary expectation of persons skilled in the resilient floor finish art that a "chemically resistant" coating should not be used where strippability is required. Thus for at least these reasons I do not believe that a person having ordinary skill in the resilient floor finish art would combine Hamrock et al. and Holman et al. as proposed in the Office Action."

Applicants accordingly request withdrawal of the 35 U.S.C. §103 (a) rejection of claims 20, 22-27 and 37 as being unpatentable over Hamrock et al. in view of Holman et al.

Serial No. 10/821,592Docket No. 117-P-1345USD3**Rejection of claim 21 under 35 U.S.C. §103(a)**

Claim 21 was rejected under 35 U.S.C. §103(a) as being unpatentable over Hamrock et al. in view of Holman et al. and Koreltz et al., on grounds like those quoted above for the above-mentioned 35 U.S.C. §103(a) rejection of claim 21 based on Bolgiano et al. in view of Koreltz et al. As noted above, a person having ordinary skill in the floor finish art who consulted Hamrock et al. would not use a waterborne overcoat atop Hamrock et al.'s intermediate coating in view of Hamrock et al.'s warnings regarding the disadvantages of aqueous emulsion based finishes. As also noted above, a person having ordinary skill in the floor finish art who consulted Holman et al. would not use Holman et al.'s chemically resistant renewal finish to make a strippable laminate finish kit for at least the reason that chemical resistance is contrary to strippability. Koreltz et al. would not provide a proper basis for ignoring these issues, and would not make obvious the strippable laminate finish kit recited in claim 21.

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination, see MPEP §2143.01. Hamrock et al., Holman et al. and Koreltz et al. involve three different types of finishes (a radiation curable 100% solids finish, a chemically resistant renewal finish and a stripper for conventional easy-to-remove finishes) and are not properly combinable. Applicants accordingly request withdrawal of the 35 U.S.C. §103 (a) rejection of claim 21 as being unpatentable over Hamrock et al. in view of Holman et al. and Koreltz et al.

Double Patenting Rejection

Claims 20-27 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 20-27 and 41-51 of copending grandparent Application No. 09/560,170. Applicants would be willing to submit an appropriate Terminal Disclaimer should any of claims 20-27 in the present application and any of claims 20-27 and 41-51 in the grandparent application be allowed.

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Conclusion

Hamrock et al.'s 100% solids radiation curable overcoat is not a waterborne overcoat and would not anticipate claims 1-19 or 36. Bolgiano et al.'s second layer would be *more* strippable than Bolgiano et al.'s intermediate coating and would not anticipate claims 20, 22-24 or 27.

For at least the reasons recited above and in the cited portions of the Hei Declaration, Koreltz et al.'s strippers are relatively mild, and would not be assumed by a person skilled in the art to be capable of removing Bolgiano et al.'s radiation-cured first layer. Even if Bolgiano et al. and Koreltz et al. were combined as proposed in the Office Action, the result would not make obvious a strippable laminate finish kit as recited in rejected claim 21, for at least the reason that Bolgiano et al. do not show a combination having a dried overcoat that is "less strippable and more wear resistant than the dried intermediate coating".

A person having ordinary skill in the floor finish art who consulted Hamrock et al. and Holman et al. would not use Holman et al.'s renewal finish atop Hamrock et al.'s intermediate coating in view of Hamrock et al.'s warnings regarding the disadvantages of aqueous emulsion based finishes and Holman et al.'s statements that its coating is chemically resistant. Koreltz et al. would not provide a proper basis for ignoring these disadvantages. The proposed combination of Hamrock et al. and Holman et al. would not make obvious the strippable laminate finish kit recited in claims 20, 22-27 and 37, and the proposed combination of Hamrock et al., Holman et al. and Koreltz et al. would not make obvious the strippable laminate finish kit recited in claim 21.

The Double Patenting Rejection can be overcome via a Terminal Disclaimer when appropriate.

Withdrawal of the rejections and passage of the application to the issue branch are requested. The Examiner is encouraged to telephone the undersigned attorney at 612-331-7412 to discuss any unresolved questions regarding this application.

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